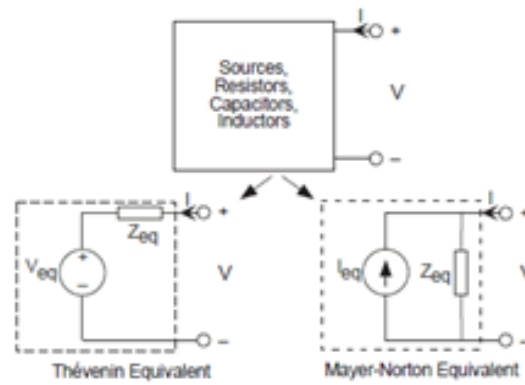


(a) Equivalent circuits with resistors.



(b) Equivalent circuits with impedances.

**Figure 3.27 Equivalent Circuits** Comparing the first, simpler, figure with the slightly more complicated second figure, we see two differences. First of all, more circuits (all those containing linear elements in fact) have equivalent circuits that contain equivalents. Secondly, the terminal and source variables are now complex amplitudes, which carries the implicit assumption that the voltages and currents are single complex exponentials, all having the same frequency.